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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,365	07/22/2003	John H. Tucker	DRTE 2 00002	7679

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EXAMINER

STOKES, CANDICE CAPRI

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,365	Applicant(s) TUCKER ET AL.	
	Examiner Candice C. Stokes	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 30-51 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/06/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1) New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "A" and "30" have both been used to designate *universal transfer device*. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 37 is rejected under 35 U.S.C. 102(b) as being anticipated by Haje (USPN 6,250,919). Haje discloses a transfer device (see Figure 3) comprising: an upper plate (13) a lower plate (7) connected to said upper plate (13) via a stem (15); stem (15) fastened to said upper plate (13) and pivotally received by opening in said lower plate (7); and a retaining element (33) for locking said stem (15) and said upper plate a particular position.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1) Claims 1-2,4-7,9-11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al (USPN 6,582,931) in view of Haje. Kois et al disclose a transfer device (see Figure 4) for dental articulator, comprising: a plate member (82); a base member (66) spaced apart from said plate member (82), said base member (66) adapted to be received by said articulator (see column 4, lines 63-64); a stem (80) connected to said plate member (82) and extending between said plate member (82) and said base member (66); a column (70) extending

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from a first surface of said base member (66). However, Kois et al fail to teach the stem being pivotally received in an opening of the column. In a similar device, Haje teaches a column (7) extending from a first surface of a base member and a stem (15) connected to a plate member, wherein the stem (15) is pivotally received in an opening of said column (7). Kois et al also discloses a retaining block (76) comprising a first opening for receiving column (70), and a second opening (83) disposed substantially perpendicular said opening for receiving a fastener. This also reads on claims 17 and 36. As to claim 2, said plate member (82) further comprises a plurality of spaced apart holes (35) extending through said plate member (82). Regarding claim 4, said stem as taught by Haje comprises a ball-shaped member extending a second end opposite said first end thereof. With respect to claim 5, Haje teaches said column (7) comprises spaced apart slots (47 and where reference 41 ends) for allowing expanding said column receive said ball-shaped member of said stem. As to claim 6, the column disclosed by Kois et al is inherently comprises expandable material since all materials expand in certain conditions. Regarding claim 7, Kois et al teach said retaining block (76) comprises at least two slots (one through which the adjustment pin 78 extends and one identified by reference # 81) in approximately 90 degrees apart and formed adjacent said block first opening. The remaining portion of the claim "for allowing said block to expand to receive said column" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. With respect to claim 9, said base member comprises least one hole (inherently) receiving a pin (64) extending from an associated articulator base. As to claim 10,

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said base member (66) comprises a magnetized member (62). Regarding claim 11, the magnetized member (62) comprises circular magnet disc (appears circular because "66" mounted on top of it is similar in shape see in Figure 5) which (inherently) engages a magnetized surface of an associated articulator. As to claims 15-16, Kois et al disclose base member (66) comprising a circular shape block as shown in Figure 5. Also, Figure 4 shows column (70) is offset to the left with respect to a central longitudinal axis of said base member (66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the stem pivotally received in an opening in a column as taught by Haje into the invention disclosed by Kois et al in order to provide a means of increasing the adjustability of the plate member with respect to base of the device for better accuracy during treatment.

2) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Haje as applied to claim 1 above, and further in view of Wong (USPN 4,624,639). Kois et al and Haje teach the claimed invention except for the plate member comprising a hole for receiving a fastener and a stem comprises a threaded opening at a first end thereof for receiving the fastener. Wong teaches plate member (82) further comprises a hole (35) capable of receiving a fastener and the stem comprises a threaded opening at a first end thereof for receiving fastener (65) as shown in Figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the plate member comprising a fastener and a hole for receiving the fastener as taught by Wong into the invention disclosed by Kois et al and Haje in order to provide a means of increasing the adjustability of the plate member with respect to base of the device for better accuracy during treatment and to provide a means for locking the plate in a particular position to prevent unwanted movement during use.

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3) Claims 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Wong (USPN 4,624,639). Kois et al disclose in combination : an articulator assembly (see Figure 13) comprising: an articulator base (56) comprising a plurality of pins (56,64) oriented around a magnetized section (62); a bite fork and jig assembly (10) comprising: a block (12), an elongated member (24) adjustably fixed to said block (12), a bite fork (14) comprising a U-shaped plate (34) and a stem (36), said bite fork being removably clamped to said elongate member (28) via a mounting support (20) extending from said elongate member (28) and receiving said stem, wherein said mounting support comprises a clamp assembly (20,25); said base (16) further comprising an opening (19) for receiving said elongated member (24) of said jig assembly (10); a transfer device comprising (as shown in Figure 4): a base member (66) adapted to be received by said articulator base (56). However, Kois et al does not teach a plate member pivotally connected to said base member via a stem. Wong teaches a plate member (70) pivotally connected to a base member via a stem as shown in Figure 1 and a retaining member (43) which receives the stem and locks said plate member into a particular position. The portion of the claim that recites "said plate member adapted to align..." is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. To claim 19, the combination further comprises a plaster material (158) as disclosed by Kois et al which is applied onto plate member (82) and is capable of aligning and removably securing said bite fork U-shaped plate to plate member (82) by means of pins 35 that extending into openings in plate member (82). Further, to claim 20, base member (66) of the

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device comprises a magnetized section (62) which is inherently received by said articulator base magnetized portion. Regarding claims 21-22, Wong teaches a the device comprising a column (42) extending from a first surface of the base member for pivotally receiving said stem of said transfer device. The transfer device also includes a retaining block (43) for locking said stem into a particular position. To claim 23, Kois et al teaches plat member (82) comprising a plurality of spaced apart holes (35) extending therethrough. As to claim 24, Wong teaches plate member (82) further comprises a hole (35) capable of receiving a fastener and the stem comprises a threaded opening at a first end thereof for receiving fastener (65) as shown in Figure 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the plate member pivotally to the base member as taught by Wong into the invention disclosed by Kois et al in order to provide a means of increasing the adjustability of the plate member with respect to base of the device for better accuracy during treatment.

As to claim 13, Kois et al and Wong teach the claimed invention except for the base member comprising a plurality of holes spaced axially apart about the magnetized member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make more than one hole, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

4) Claims 25-28,30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Wong as applied to claim 18 above, and further in view of Haje. Kois et al and Wong teach the claimed invention except for the newly cited limitations in claims 25-28,30, and 32-36. Regarding claim 25, said stem as taught by Haje comprises a ball-shaped

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member extending a second end opposite said first end thereof. To claim 26, Haje teaches said column (7) comprises spaced apart slots (47 and where reference 41 ends) for allowing expanding said column receive said ball-shaped member of said stem. As to claim 27, the column disclosed by Kois et al is inherently comprises expandable material since all materials expand in certain conditions. Regarding claim 28, Kois et al teach said retaining block (76) comprises at least two slots (one through which the adjustment pin 78 extends and one identified by reference # 81) in approximately 90 degrees apart and formed adjacent said block first opening. The remaining portion of the claim "for allowing said block to expand to receive said column" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. With respect to claim 30, said base member comprises least one hole (inherently) receiving a pin (64) extending from an associated articulator base. As to claims 34-35, Kois et al disclose base member (66) comprising a circular shape block as shown in Figure 5. Also, Figure 4 shows column (70) is offset to the left with respect to a central longitudinal axis of said base member (66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the stem pivotally received in an opening in a column as taught by Haje into the invention taught by Kois et al and Wong in order to provide a means of increasing the adjustability of the plate member with respect to base of the device for better accuracy during treatment.

As to claim 32, Kois et al and Wong teach the claimed invention except for the base member comprising a plurality of holes spaced axially apart about the magnetized member. It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to make more than one hole, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

5) Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Haje as applied to claim 1 above, and further in view of Yamada (USPN 6,517,347). Kois et al and Haje disclose the claimed invention except for the magnet disc being received within a recess within the base member. Yamada teaches a mounting disk wherein a magnet disk (65) is received within a recess (70) within the base member (60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the magnet disc disclosed by Kois et al and Haje being received within a recess as taught by Yamada in order to firmly attract by its magnetic force an iron substrate disposed on the bottom surface of the model so that fixing is achieved by the action of the magnetic force of the magnet.

6) Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Wong as applied to claim 18 above, and further in view of Yamada. Kois et al and Wong disclose the claimed invention except for the magnet disc being received within a recess within the base member. Yamada teaches a mounting disk wherein a magnet disk (65) is received within a recess (70) within the base member (60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the magnet disc disclosed by Kois et al and Wong being received within a recess as taught by Yamada in order to

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firmly attract by its magnetic force an iron substrate disposed on the bottom surface of the model so that fixing is achieved by the action of the magnetic force of the magnet.

7) Claims 38-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kois et al in view of Yamada. Kois et al disclose a plate (66) ; a support member (56) secured to said plate (66) ; a magnetized member (62) positioned on a first surface of said support member (56); and at least one pin (64) inherently received by at least one hole in said first surface of said support member (56). However, Kois et al does not disclose or teach a recess formed in the first surface of a the support member and a magnetized member being positioned within the recess. Yamada teaches a mounting disk wherein a magnet disk (65) is received within a recess (70) within the base member (60). With respect to claims 40,47 and 50, Kois et al also discloses the device comprising a plurality of holes (for receiving “58,64”) spaced apart about the magnetized member (62) and legs (58,64) or pins extending from said plate. To claims 41 and 42, the legs are fastened to the plate (66) and support member (56) via a fastener at the end of the legs enclosed with the plate. To claims 43 and 44, finger grips are on the elements “81” and “24” disclosed by Yamada spaced 90 degrees apart for manually gripping the device. Regarding claim 45, a slot extending from an end of the plate through which “24” extends. As to claim 46, index mark (66) is adjacent the recess as shown in Figure 1 of Yamada. To claim 48, the device disclosed by Kois et al is made of metal. As to claim 49, the support member (56) has sides, which protrude beyond the sides of the plate (66) as shown in Figure 13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the magnet disk disclose by Kois et al being received within a recess as taught by Yamada in

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order to firmly attract by its magnetic force an iron substrate disposed on the bottom surface of the model so that fixing is achieved by the action of the magnetic force of the magnet.

Allowable Subject Matter


Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candice C. Stokes whose telephone number is (571) 272-4714. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cary E. O'Connor
Primary Examiner

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A handwritten signature in black ink, appearing to be 'CS' or similar initials, positioned above the printed name.

Candice C. Stokes